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ETHNOBOTANICAL STUDIES ON THE FERNS AND FERN ALLIES OF RAJASTHAN

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ABSTRACT

Description is given of the ethnobotanical importance of species of ferns and fern allies collected from different localities throughout Rajasthan. The 'tribal' informations are confirmed by Ayurvedic Vaidiyas and 'Hakeems'.

In Rajasthan the well-known tribal races are Bheel, Garassia, Sanshi, Meena, Gadaria-lohar, etc. Some of them inhabit the Aravallies and Chambal revines which possess sufficient vegetation of pteridophytes (Bir and Verma, 1963 ; Bhardwaja et al., 1979 ; Bohra et al., 1980). Ethnobotanical survey of these places has yielded interesting results, some of which are given in the present paper. During survey, Tape recorder was used as the language of many 'Tribal races' could not be understood well and got the conversation translated by some educated persons of the race, now residing in urban areas.

OBSERVATIONS

1. **Actiniopteris radiata** (Swartz.) Link. (Actiniopteridaceae).

Local name : Morpankhi, Sanjeevani, Jahareelapodha.

Locality : Goramghat, Mt. Abu, Dabla, Ajmer, etc.

Collection No. 2010.

It is used in acute bronchitis ; the ash of the leaves is taken with honey, 2-3 times a day, and in gynaecological disorders. The paste of 5-6 leaves mixed with fresh cow milk (nearly 200 ml) is taken for a week or so, to overcome irregularity in menses period. The ash (approximately 2-3 gms) of the plant mixed in fresh cow milk (nearly 200 ml) is given to a lady for a fortnight after menses period who wishes to have an issue. On the other hand the paste of 8-10 leaves mixed with thin curd (nearly 250 ml) is given for birth control. Decoction of its leaves is also used in tuberculosis in the Mt. Abu area by Bheels.

Adiantum: Three species of *Adiantum* are found in the state i.e. *A. capillus-veneris, A. lunulatum* and *A. incisum*. All are generally called as 'Hansraj' or 'Hanspadi'

2. **Adiantum capillus-veneris** L. (Adiantaceae).

Local name : Hansraj, Hanspadi.

Locality : Mt. Abu, Menal, Gwaparnath (Kota), Goramghat, etc.

Collection No. 2018.

Decoction of 2-3 fresh, as well as, dry leaves along with 5-6 pepper or paste of 2-3 leaves with honey is used in acute bronchitis. Its decoction along with pepper is also said to be a remedy for fever. In Goramghat area decoction of the leaves mixed with tea is given for curing irregularity in menstrual period (probably a replacement of *Actiniopteris radiata*).

3. **A. incisum** Forsk. (Adiantaceae).

Local name : Hansraj.

Locality : Throughout Aravalli Hills.

Collection No. 2065.

Date of receipt : 13.5.85 Date of acceptance : 16.7.86

Used in cough and diabetes. The juice of leaves is used in skin diseases ('Ratwa' in Gujrati) in Mt. Abu area by tribal race 'Bheel'.

4. **Adiantum lunulatum** Burm. (Adiantaceae).

Local name : Hansraj.

Locality : Menal, Gwaparnath, Ajmer, Mt. Abu.

Collection No. 2086.

It is very common in occurrence at Mt. Abu. Decoction of plants is used in cough, asthma and fever. The paste of leaves is used in leprosy and erysiplas. It is also used to overcome 'hair falling' by applying paste of its leaves on head for an hour or so before taking bath for a fortnight or so.

5. **Hypodematium crenatum** (Forsk.) Kuhn (Aspidiaceae).

Local name : Jadibuti.

Locality : Mt. Abu, Gwaparnath (Kota).

Collection No. 2032.

It is given to ladies for conception ; the paste or powder of leaves along with fresh cow milk is used for a week or so, five days after the menstrual period for about a week.

6. **Tactaria macrodonta** (Fee) C. Chr. (Aspidiaceae).

Local name : Jadibuti.

Locality : Mt. Abu.

Collection No. 2020.

Occurs frequently at Mt. Abu. The leaves mixed with honey or decoction of leaves is given to asthma and bronchitis patients. Wood cutters use the paste of leaves on irritation caused by stings of honey-bee, centipedes, etc.

Ethnobotanical importance of ferns and fern allies is not well-known (Dixit, 1975) and almost no work has been done on this aspect in Rajasthan. Some of the informations included in this paper are incompletely known in Ayurvedic literature while others are new, *e.g.* regarding the use of *Actiniopteris radiata* and *Hypodematium crenatum* in gynaecological disorders and in birth control. Similarly the use of *Actiniopteris* in tuberculosis is not published anywhere in the literature. We hope to get some more ethnobotanical informations during further investigations. Biochemical studies of some of the interesting ferns and fern allies are going on in this laboratory to confirm the informations received from the different races.

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